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Date: February 07, 2012
Subject: Inorganic Data Validation (IM2 Level)
Project: 180-3644-1
Site: Dimock

From:

Ex. 4 - CBI

To: Colleen Walling
ESAT Region 3 Project Officer

OVERVIEW

Third party Project 180-3644-1 consisted of eleven (11) aqueous samples analyzed for the following parameters according to the methods listed below. Samples were analyzed by TestAmerica-Pittsburgh (TALPA) through the Delivery of Analytical Services (DAS) program.

<u>Parameter</u>	<u>Analytical method</u>	<u>Parameter</u>	<u>Analytical method</u>
Ammonia	EPA 350.1	Acidity	SM 2310B
HEM (Oil & Grease)	EPA 1664A	Chloride	EPA 300.0
Alkalinity	SM 2320B	Total Dissolved Solids	SM 2540C
Total Suspended Solids	SM 2540D	pH	SM 4500H+ B
Methylene Blue Active Substances	SM 5540C		

SUMMARY

Data were validated according to Region 3 Modifications to the National Functional Guidelines for Inorganic Data Review, Level IM2, and is assigned the Superfund Data Validation Label S4VM (Stage_4_Validation_Manual). Areas of concern with respect to data usability are listed below.

Data in this case have been impacted by sample holding time infraction and outliers present in laboratory blanks. Details of these outliers are discussed under “Major and Minor Problems,”

specific samples affected are outlined in “Table 1A” and qualified analytical results for all samples are summarized on Data Summary Forms (DSFs).

MAJOR PROBLEM

The holding time of forty-eight (48) hours from the time of sample collection to sample analysis for Methylene Blue Active Substances has been exceeded by four (4) days for all samples. Positive results for this analyte may be biased low; however, the “L” qualifier for this outlier has been superseded by “B” on the DSFs. Quantitation limits for this analyte in affected samples are unusable and have been qualified “R” on the DSFs.

MINOR PROBLEM

Method Blanks (MBs) had reported results greater than the Method Detection Limits (MDLs) for ammonia, alkalinity and Methylene Blue Active Substances. Positive results for these parameters in affected samples which are less than five times (<5X) blank concentrations may be biased high and have been qualified “B” on the DSFs.

NOTES

Results for quality control analyses [Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD), laboratory duplicate and matrix spike] were within control limits for all parameters for the samples in this sample set.

Test parameter Oil & Grease is officially named n-Hexane Extractable Material (HEM).

Sample volumes other than one (1) liter were used in the analysis of HEM for the samples in this sample set. Dilution factors were adjusted on the DSF to reflect this variance.

Sample volume other than 250 milliliters was used in the analysis of Total Suspended Solids for sample S-1. The dilution factor was adjusted on the DSF to reflect this variance.

The requirement for ammonia, Total Dissolved Solids and Total Suspended Solids MDLs to be performed within one (1) year of analysis of samples was not met by the laboratory. No action was taken by the reviewer based on this finding.

ATTACHMENTS

INFORMATION REGARDING REPORT CONTENT

Table 1A is a summary of qualifiers applied to the laboratory-generated results during data validation.

Table 1A	Summary of qualifiers on data summary forms after data validation
Table 1B	Codes used in comments column of Table 1A
Appendix A	Glossary of Data Qualifier Codes
Appendix B	Data Summary Form(s)
Appendix C	Chain of Custody Records
Appendix D	Laboratory Case Narrative

DCN: 180-3644-1_General